

Project Proposal

1. Project Name: Hunaha City Park Natural Resource Management

2. Applicant: Elgin High School

3. Participating Landowner(s) and Agencies:

Elgin School District #23
City of Elgin

4. Project Contact(s): Yuki Gleason, Science Teacher
Tobin Koehn, Agriculture Teacher
Joe Garlitz, City Manager

5. Project Location: City of Elgin, Union County, Oregon

Beginning at the southwest corner of the Northwest quarter of Section 14, in Township 1 North, Range 39 East of the Willamette Meridian, in Union County, Oregon; thence East 45 rods; thence 22 degrees West of North for a distance of 18 rods to the waters edge on the West side of the Grande Ronde River; thence in a Northwesterly direction along said river to the right-of-way of the City of Elgin's Water pipe line; thence West to the Section line between Section 14 and 15; thence South about 39 rods to the place of the beginning.

6. Project Description:

Introduction:

The Hunaha Park Project has two components: 1) A day use and RV camping park in development by the City of Elgin; and 2) A natural resource management plan developed by the 1996 Advanced Biology Class of Elgin High School. The site was a day use park from about 1910 until about 1962. Since that time the site has been abandoned. This site has been used by boaters as a place to start or finish float trips. The project was first promoted by the Elgin Chamber of Commerce. The Hunaha Park area was identified as a project site for educational purposes in the summer of 1996 with student projects started in the fall of that year. This site has provided students with "hands-on, real world" educational experiences.

Existing condition:

About four acres of this land was once a pond and marshy area which was filled with mill-yard waste, partially covered with topsoil and then planted with ponderosa pine and grasses. About 15 years ago, Boise Cascade company filled the pond and adjacent area with material removed from its log yard on the southwest part of Elgin. The waste material is predominantly

bark and wood chips. The fill material is about four to five feet above the natural ground surface on the north end of the site. It is estimated to be more than five feet deep in the west half of the site where the small pond once existed. The waste material has been covered with by 2 to 6 inches of gravelly loam to very gravelly sandy loam mineral soil. The southern edge of the site is now a dumping ground for rocks and sediments from undetermined sources. Several deer carcasses have also been dumped.

Most of the ground is sparsely vegetated. Ponderosa pine seedlings were apparently hand planted across the site. Some growing well and in many others the growth rate is slow. Cottonwood trees are located in several places. Diffuse knapweed is a major problem at the site. Vegetation is inadequate along the river.

Specific Actions:

- Plant selected native plants in the spring of 1997 using island biogeography theory. Initial plantings will be grown in the high school greenhouse. Ammendment of the soil within each "island" will be necessary due to nutrient definciency of the fill. Survial rates and species distribution will be recorded yearly. New plantings will occur until native plant communities are stabalized. Remove invasive non-native plant species. Revegetate riparian zone to enhance wildlife habitat.
- Five photo points will be established within the park and marked with labeled stakes. Pictures will be taken twice a year (Spring and Fall). The data will be cataloged to monitor the restoration project.
- Build bird boxes for selected bird species and place in the park. Monitor all bird species in the spring and fall of each year. Record the data. Develop a birding brochure.
- Monitor water quality of the Grande Ronde River monthly for temperature, nitrogen, dissolved oxygen, and coliform bacteria. Record the data.
- Enhance fish habitat by placing woody debris and large rocks in the river, consulting the ODFW for proper procedure and regulations. Monitor fish species. Establish a remote site fish incubator on Philips creek (which flows into the Grande Ronde Rivers near Hunaha Park). Establish a classroom incubator for student educational purposes.
- Develop a WEB page to share information about the park and restoration with other students and interested people.
- Build an interpretive trail along the east edge of the park along the Grande Ronde river. Put signs along the trail that will educate and inform the public about the history, watershed, wildlife and native plants of the area.

Benefits: Restoration of the riparian zone.

Enhance wildlife habitat.

Public Education

Provides for the students in our Community:

- Hands-on activities- relevant science.
- Thematic, integrated (science, math, agriculture, social science, language arts) curriculum base.
- Living laboratory.
- Community action projects - encourage the ethic of service and land stewardship.
- Field research studies - long and short term.
- Resource management skills- provides a model of collaboration for solving complex natural resource issues.
- Technical skills - experience could lead into a community college program for natural resource technicians.

Project Maintenance:

Project will be maintained by the science and agriculture departments of Elgin High School. All records and data will be on file at the school. Updates can be provided yearly.

Permits:

A permit will be needed for the fish habitat enhancement plan. In particular, the placement of woody debris and rocks within the stream. Also the remote site incubator project will need a permit from the ODFW.

Monitoring Plan:

Monitoring will take place during the school year calendar (August through May) by the students and supervised by the teachers.

Work Dates:

Project started September 1996. The amount of work to be done depends on funding.

Work Completed:

- September - November 1996 - research and natural resource plan completed; approval obtained from Elgin City Council.

Tentative plan:

- January 1997 - start germination of native plants; design web page; design interpretive trail and signs; obtain necessary permits; monitor water quality now until June; design park brochure.
- February 1997 - build remote site fish incubator, build bird boxes.
- March 1997 - Set up classroom incubator, place remote site fish incubator in stream; remove non-native noxious weeds from the park.
- April 1997 - hatch fish in classroom incubator and remote site incubator; plant native plant species in the park; place bird boxes in the park.

- May 1997 - build interpretive trail, build new greenhouse, establish photo points and take pictures; monitor bird species; release classroom fish into Roulette's Pond.
- June 1997 - place woody debris and rocks in stream.
- Project will be on-going in the next school years.

8. Project Budget:

<u>Work Item</u>	<u>Total Cost</u>	<u>BPA</u>	<u>Financial Participation</u> <u>Owner</u>	<u>Other*</u>
Materials				
Natural resource plan printing	150.20		150.20	
Remote site incubator	275.00	275.00		
bk plastic barrel				
PVC pipes				
7 screens				
silicon				
5 gallon buckets				
sand bags				
burlap bags				
valve & caps				
wood				
pea gravel				
water diffuser				
Classroom incubator	387.25	137.25		250.00
refrigerator	250.00			250.00
20 gallon aquarium				
tubing				
air filter				
water pump				
air stone				
Fish Equipment	196.95	196.95		
Seine				
Books				
Birding Equipment	202.85	202.85		
Binnoculars (3)				
Birding CD				

<u>Work Item</u>	<u>Total Cost</u>	<u>Financial Participation</u>		
		<u>BPA</u>	<u>Owner</u>	<u>Other*</u>
Water Quality Equipment	323.45	323.45		
Dissolved O ₂ Test				
Nitrate Test				
pH Test				
Hobo-Temp				
Logbook Software				
Total Coliform Test				
Photopoint Equipment	75.50	75.50		
Compasses (2)				
Greenhouse	8,621.61			8,621.61
Gable Arch House				
Polyvinyl, 6ml				
Shade cloth				
Heater				
Thermostat				
Fan Jet				
Shelving				
Irrigation system				
* We are still searching for a less expensive source for the greenhouse.				
Plant Equipment	455.60	455.60		
Tree trays (100)				
Flats (100)				
1 gallon plastic pots (100)				
Potting soil (3 bags)				
Plant propagation books				
Pick axe				
Post hole digger				
Shears				
Hand trowels (5)				
Interpretive trail	825.00	325.00		500.00
signs (5)				
posts (5)				
wood chips	500.00			500.00
WEBPage Software	69.95	69.95		

Labor and Services

<u>Work Item</u>	<u>Total Cost</u>	<u>BPA</u>	<u>Financial Participation</u> <u>Owner</u>	<u>Other*</u>
Native plant propagation = 20 hours x 10 students	1200.00		1200.00	
Water Quality Monitoring & record keeping = 7 hours x 2 students	140.00		140.00	
Planting Native species = 3 hours x 20 students	360.00		360.00	
Build Bird Boxes & placement in the park = 3 hours x 20 students	360.00		360.00	
Photo points = 4.5 hours x 2 students	81.00		81.00	
Build Interpretive Trail & place signs = 4.5 hours x 20 students	540.00		540.00	
Monitor Bird Species = 1.5 hours x 20 students	180.00		180.00	
Build Instream incubator & install = 3 hours x 10 students	180.00		180.00	
Build and install Greenhouse = 10 hours x 10 students	600.00		600.00	
Woody Debris and Rock installation = 3 hours x 5 students	90.00		90.00	
Noxious Weed Spraying = County Weed Control				